| Notice of Allowability   | Application No.          | Applicant(s)  |       |  |
|--|--------------------------|---|-------|--|
|  | 09/912,444               | DALTON ET AL.                                       |       |  |
|  | Examiner                 | Art Unit  |       |  |
|  | Daniel S. Metzmaier      | 1712  |       |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |                          |   |       |  |
| 1. This communication is responsive to the IDS of 06 Sept. 2005 & response of 27 June 2005.  |                          |   |       |  |
| 2. The allowed claim(s) is/are <u>31-34 and 65-73</u> .  |                          |   |       |  |
| <ul> <li>3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* Certified copies not received:</li> </ul>              |                          |   |       |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |                          |   |       |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |                          |   |       |  |
| <ul> <li>5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of</li> </ul>                          |                          |   |       |  |
| each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |                          |   |       |  |
|  |                          | . ·   |       |  |
| Attachment(s)  |                          |   |       |  |
| 1. Notice of References Cited (PTO-892)  | 5. Notice of Informal Pa | Notice of Informal Patent Application (PTO-152)     |       |  |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   |                          | 6. Interview Summary (PTO-413), Paper No./Mail Date |       |  |
| <ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0.<br/>Paper No./Mail Date 09/06/2005</li> </ol>  |                          | 7.   Examiner's Amendment/Comment                   |       |  |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material   | 8.  Examiner's Statement | nt of Reasons for Allo                              | wance |  |
|  | 9.                       |   |       |  |
|  |                          |   |       |  |

#### **EXAMINER'S AMENDMENT**

Claims 31-34 and 65-73 are allowed.

## **Drawings**

1. The drawings were received on March 5, 2002. These drawings are acceptable.

## Examiner's amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

An amendment to the specification follows. Replace all previous versions of the paragraphs cited in said amendment.

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# In the specification

Please amend the paragraph beginning ion page 15, line 15, as follows:

In a further embodiment, the  $\pi$ -electron conjugated bridge includes a fused trithiophene group having the structure:

wherein R<sub>5</sub> and R<sub>6</sub> are, for example, alkyl or silyl groups selected from t-butyldimethyl silyl and perfluoropropyldimethyl silyl groups, and R represents a functional group capable of forming a covalent bond with the donor and acceptor portions of the chromophore, or when the donor is incorporated into a chromophore, R represents the rest of the chromophore. A synthetic scheme for the preparation of this class of bridge is presented in FIGURE 5. Chromophores that include the bridge are illustrated in FIGURES 2F AND 2G.

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Please amend the paragraph beginning ion page 16, line 9, as follows:

In still another embodiment, the  $\pi$ -electron conjugated bridge includes a substituted thiophene group having the structure:

wherein R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, and R<sub>10</sub> are hydrogen or alkyl groups, or wherein R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, and R<sub>10</sub> are fluorine, or wherein R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are fluorine and R<sub>10</sub> is a trifluoromethyl group; and R represents a functional group capable of forming a covalent bond with the donor and acceptor portions of the chromophore, or when the donor is incorporated into a chromophore, R represents the rest of the chromophore. A synthetic scheme for the preparation of this class of bridge is presented in FIGURE 6. A synthetic scheme for the preparation of a representative embodiment of this bridge is provided in Example 2. Chromophores that include the bridge are illustrated in FIGURES [[,]] 8 [[,]] and 14.

3. The following is an examiner's statement of reasons for allowance: see applicants response filed June 27, 2005, which provide resolution of the remaining issues. The amendment to the specification corrects the paragraph citation to correspond to the line numbers in the specification of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel S. Metzmaier Primary Examiner

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DSM